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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,619	02/28/2002	Bo U. Curry	10011208-1	7930

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Agilent Technologies, Inc.
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EXAMINER

SUNG, CHRISTINE

ART UNIT PAPER NUMBER

2878

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,619

Applicant(s)

CURRY ET AL.

Examiner

Christine Sung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☒ Claim(s) 30-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Objections

3. Claims 30-33 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Further, claim 31 is objected to for being dependent upon an already objected claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noblett (US Patent 6,471,916).

Regarding claims 1-2, 12, 15-16 and 25, Noblett discloses a method of optically scanning a sample in connection with a micro array comprising:

Providing an array (Figure 1, element 100);

Performing an automated scan of the sample wherein some of the results of the scan are saturated to obtain non-saturated results

And performing subsequent scans at decreased or increased sensitivity from the first scan to obtain another set of non-saturated results (column 2, lines 46-55, 62-64 and Column 7, lines 5-23, and claims 1-3).

Further, Noblett discloses that DNA and RNA can be used as samples (column 1, lines 35-37), and these samples consist of polypeptides and nucleic acids.

Noblett discloses using a series of scans where the samples are irradiated and there is an iterative adjustment of the sensitivity of the system to define the optimal settings for a given sample and fluorophore. Although Noblett does not specifically disclose the order in sensitivity of the subsequent scans it would have been a matter of design choice to decrease the sensitivity with each subsequent scan. One of ordinary skill in the art would have been motivated to begin with the maximum sensitivity and to decrease sensitivity with each subsequent scan so that the threshold or range in which the optimal settings for a given sample can be determined in an orderly fashion.

Regarding claims 3, 6, 8, 10, 11, 17, 19, 21, 23 and 24 Noblett discloses that the sensitivity of the scans can be adjusted between scans (column 7, lines 5-23) to determine the proper sensitivity for the particular sample. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used as many scans as necessary or desired, since it has been held that mere duplication of the essential working parts of device involves only routine skill in the art. *St Regis Paper Co. v. Bemis Co.*, 549 F.2d 833, 193 USPQ 8(CA 71977).

Regarding claims 4, 5, 7, 9, 18, 20 and 22, Noblett discloses determining the saturation of a certain sample (column 6, lines 14-59). As each scan is performed, a calibration curve is determined, and the parameters that determine saturation (i.e. concentration, radiation intensity, etc.) are recorded to determine the optimal conditions for a particular sample. Although Noblett does not specify that this saturation is determined after every scan, it is obvious that his method allows for the determination of saturation for a particular sample as the conditions of the scan are adjusted. Therefore since the objective of Noblett is to determine the optimal conditions, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have determined whether the results from a particular scan were saturated.

Regarding claims 13-14 and 26-27, Noblett discloses a computer (element 60) for receiving the signals produced by the scanned sample. The data is then used to produce a concentration to brightness curve. It is well known in the art that computers can be connected to other peripheral devices to transmit information to different processors that are remote from the present computer. One of ordinary skill in the art would be motivated to use such a peripheral

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device to process and produce a concentration to brightness curve or a calibration curve of the instant sample, for example in order to be able to remotely analyze the data.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. US Patent 6078390- this reference discloses a method for setting detection sensitivity but increases the sensitivity with each subsequent scan.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 703-305-0382. The examiner can normally be reached on Monday- Friday 7-4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 703-308-4852. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Christine Sung
Examiner
Art Unit 2878

CS


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER